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EXAMINER

HWANG, JOON H

ART UNIT PAPER NUMBER

2162

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/695,636

Applicant(s)

DEGUCHI ET AL.

Examiner

Joon H. Hwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5/18/04 6) ☐ Other: _____

11/17/04

DETAILED ACTION

1. The applicants requested for reconsideration in the amendment received on 11/17/04.

The pending claims are 1-42.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 18, 32, 35, and 37-42 have been considered but are moot in view of the new ground(s) of rejection.

Especially the limitations, "the limitations of an indicator for activation at the terminal unit to cause downloading of the contents associated with the search results", are addressed in the following rejection.

The applicants argue that Tomita does not teach or suggest searching past broadcast program. The examiner respectfully traverses. Tomita teaches keeping listings of broadcast programs aired by broadcast stations in (computer) files (lines 21-37 in col. 1). Tomita teaches searching a list of broadcasted programs via a graphical user interface providing search buttons (i.e., "last week" search button 51 in fig. 9 enables a user to search broadcasted programs).

In response to applicants' argument that Lawler does not suggest or teach downloading of anything, it is a well settled rule that a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. See *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979) and *In re Lamberti*, 545 F.2d 747, 192 USPQ 278 (CCPA 1976) as well as *In re Bode*, 550 F.2d 656, 193 USPQ 12 (CCPA

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1977) which indicates such fair suggestions to unpreferred embodiments must be considered even if they were not illustrated. Additionally, it is an equally well settled rule that what a reference can be said to fairly suggest relates to the concepts fairly contained therein, and is not limited by the specific structure chosen to illustrate such concepts. See *In re Bascom*, 230 F.2d 612, 109 USPQ 98 (CCPA 1956).

Lawler shows a capability of recording a broadcast program at a viewer station (fig. 2 and lines 10-15 and lines 49-57 in col. 14), wherein data transmission of the broadcast program are received from the head end (fig. 1). Lawler discloses "order" interactive button 138 in fig. 9. A user at the viewer station can watch a past broadcast program by ordering the past broadcast program via the order button. This teaches contents of the past broadcast program would be transmitted from the head end to the viewer station of the user. In other words, the contents of the past broadcast program are **downloaded** to the viewer station for viewing the past broadcast program.

Tomita and Lawler disclose searching a past broadcast program via a graphical user interfaces. Therefore, based on Tomita in view of Lawler, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Lawler to the system of Tomita for an order button in order to allow the user to order a user selected program from searched program schedule information, which causes downloading contents of the user selected program from the server to the viewer station.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections

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are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

"Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, **test is what combined teachings of references would have suggested to those of ordinary skill in art.**" *In re Keller*, Terry, and Davies, 208 USPQ 871 (CCPA 1981)

"Reason, suggestion, or **motivation to combine two or more prior art references** in single invention **may come from references themselves**, from **knowledge of those skilled in art** that certain references or disclosures in references are known to be of interest in particular field, or from **nature of problem to be solved;**" *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.* U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181

"Prima facie case of obviousness is established when **teachings of prior art appear to suggest claimed subject matter to person of ordinary skill in art**; it is incumbent upon applicant to go forward with objective evidence of unobviousness once prima facie case is established." *In re Rinehart* (CCPA) 189 USPQ 143 Decided Mar. 11, 1976 No. 75-608 U.S. Court of Customs and Patent Appeals.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 2, 4-10, 12-19, 21-26, 28-32, and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of Lawler et al. (U.S. Patent No. 5,585,838).

With respect to claim 1, Tomita discloses a searching system for searching contents that were broadcasted (lines 44-52 in col. 2, lines 19-25 in col. 11, and fig. 13). Tomita discloses an inputting unit comprising first storing means for storing information representing at least time at which contents were broadcasted corresponding to a predetermined operation (lines 27-29 and 44-52 in col. 2, lines 8-16 in col. 4, lines 14-26 in col. 5, lines 36-40 in col. 7, and lines 26-29 in col. 11) and first communicating means for transmitting the information representing time stored in the storing means to an external unit (lines 15-27 in col. 2, lines 8-16 and 55-61 in col. 4, lines 14-26 in col. 5, and lines 46-50 in col. 7). Tomita discloses a searching unit comprising second storing means for correlatively storing information representing contents and broadcast time thereof (lines 29-43 in col. 2, lines 8-16 in col. 4, lines 31-42 in col. 5, lines 24-29 in col. 8, and lines 30-35 in col. 11) and searching means for searching information representing the contents stored in the second storing means corresponding to the information representing time (lines 44-52 in col. 2, lines 27-33 and 48-54 in col. 4, lines 31-42 in col. 5, line 60 in col. 7 thru line 14 in col. 8, and lines 19-25 in col. 11). Tomita discloses a terminal unit comprising second communicating means for receiving the information representing time transmitted from the inputting unit through the first

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communicating means (lines 15-27 in col. 2 and lines 31-42 in col. 5) and third communicating means for transmitting the information representing time received by the second communicating means and receiving search results transmitted from the searching unit (lines 44-52 in col. 2, lines 31-52 in col. 5, and lines 19-25 in col. 11).

Tomita discloses first displaying means for displaying the information representing time received by the second communicating means and the search results by the searching unit (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 52-57 in col. 10, and lines 36-41 in col. 11). Tomita discloses buttons for operations, such as time-slot change, category-search, and search (fig. 6 and fig. 9).

Tomita does not explicitly disclose an indicator for activation at the terminal unit to cause downloading of the contents associated with the search results. However, Lawler discloses a program time guide for an interactive viewing system that allows a user to control the item and channels for which program information is displayed (abstract) by navigating program schedule information. Lawler discloses program data can be either analog video signals or digital video signals (lines 30-36 in col. 5). Lawler discloses an order button for ordering a selected program from a program schedule (line 61 in col. 13 thru line 48 in col. 14 and figs. 7-9), which teaches causing downloading of the contents associated with the search results. Therefore, based on Tomita in view of Lawler, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Lawler to the system of Tomita for an order button in order to allow the user to order a user selected program from searched program schedule information.

With respect to claim 2, Tomita discloses the information representing the contents includes information about the contents (fig. 14).

With respect to claim 4, Tomita discloses the claimed subject matter as discussed above. Tomita further discloses a predetermined operation is performed with the terminal unit corresponding to the search results obtained by the searching means and displayed on the first displaying means (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 36-40 in col. 7, lines 52-57 in col. 10, and lines 26-41 in col. 11). Tomita is silent on a search result that is purchasable. However, Lawler discloses ordering a selected program in a searched program schedule information (line 61 in col. 13 thru line 48 in col. 14 and figs. 7-9), which teaches the search result is purchasable, for a profit from business marketing. Therefore, based on Tomita in view of Lawler, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the search result as purchasable in order to make a profit from the business marketing.

With respect to claim 5, Tomita discloses the transmission of the information representing time from the inputting unit to the terminal unit is virtually displayed (lines 22-43 in col. 2, line 64 in col. 3 thru line 7 in col. 4, lines 5-13 in col. 5, and lines 54-64 in col. 6).

With respect to claim 6, Tomita discloses second displaying means for displaying entries of information representing time stored in the first storing means (fig. 1, fig. 9, lines 5-13 and 27-29 in col. 5, and lines 54-64 in col. 6). Tomita discloses when the information representing time is received by the second communicating means, the

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virtual display of the first displaying means of the terminal unit is correlated with the display of the entries of the information representing time displayed on the second displaying means of the inputting unit (lines 44-52 in col. 2, lines 8-16 in col. 4, and lines 43-52 in col. 5).

With respect to claim 7, Tomita discloses when the number of entries of the information representing time displayed on the second displaying means decreases, the number of entries of the information representing time displayed on the first displaying means increases (lines 8-16 and 35-54 in col. 4, lines 30-42 in col. 5, and lines 52-57 in col. 10).

With respect to claim 8, Tomita discloses the terminal unit is an information terminal unit that is installed as a public unit (fig. 2, fig. 3, and lines 29-35 in col. 6).

With respect to claim 9, Tomita discloses the terminal unit is composed of a personal computer (lines 29-35 in col. 6).

With respect to claim 10, Tomita teaches a musical piece content (fig. 9 and lines 42-48 in col. 14).

The limitations of claim 12 are rejected in the analysis of claim 10 above, and the claim is rejected on that basis.

With respect to claim 13, Tomita discloses interface means for allowing information representing the contents stored in the second storing means and/or broadcast time of the contents to be changed from an external unit that has been properly filtered (line 65 in col. 6 thru line 4 in col. 7, lines 24-43 in col. 8, and lines 34-43 in col. 9).

With respect to claim 14, Tomita discloses program storing means for storing a control program that controls the inputting unit and wherein the control program is transmitted from the terminal unit to the inputting unit by the first communicating means and the second communicating means and stored to the program storing means (lines 22-43 in col. 2, line 64 in col. 3 thru line 7 in col. 4, lines 11-20 in col. 6, line 60 in col. 7 thru line 14 in col. 8, and fig. 9).

With respect to claim 15, Tomita discloses the control program is transmitted from the searching unit to the terminal unit by the third communicating means and then transmitted from the terminal unit to the inputting unit (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, and lines 30-43 in col. 8).

With respect to claim 16, Tomita discloses connecting means for connecting the terminal unit to a predetermined network and wherein the control program is transmitted to the terminal unit through the predetermined network connected to the terminal unit and then transmitted from the terminal unit to the inputting unit by the connecting means (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, lines 30-43 in col. 8, lines 29-40 in col. 6, fig. 2, and fig. 3).

With respect to claim 17, Tomita discloses reading means for reading data recorded on a predetermined record medium and wherein the control program is read from the record medium by the reading means and transmitted to the inputting unit (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, lines 30-43 in col. 8, lines 29-47 in col. 6, fig. 2, and fig. 3).

The limitations of claims 18, 32, and 35-42 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

The limitations of claim 19 are rejected in the analysis of claim 2 above, and the claim is rejected on that basis.

The limitations of claim 21 are rejected in the analysis of claim 4 above, and the claim is rejected on that basis.

The limitations of claim 22 are rejected in the analysis of claim 5 above, and the claim is rejected on that basis.

The limitations of claim 23 are rejected in the analysis of claim 6 above, and the claim is rejected on that basis.

The limitations of claim 24 are rejected in the analysis of claim 7 above, and the claim is rejected on that basis.

The limitations of claim 25 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

The limitations of claim 26 are rejected in the analysis of claim 9 above, and the claim is rejected on that basis.

The limitations of claim 28 are rejected in the analysis of claim 14 above, and the claim is rejected on that basis.

The limitations of claim 29 are rejected in the analysis of claim 15 above, and the claim is rejected on that basis.

The limitations of claim 30 are rejected in the analysis of claim 16 above, and the claim is rejected on that basis.

The limitations of claim 31 are rejected in the analysis of claim 17 above, and the claim is rejected on that basis.

5. Claims 3, 11, 20, 27, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of Lawler et al. (U.S. Patent No. 5,585,838), and further in view of Yoshinobu et al. (U.S. Patent No. 5,686,954).

With respect to claim 3, Tomita and Lawler disclose the claimed subject matter as discussed above except second contents are multiple of first contents. However, Yoshinobu discloses a searching capabilities and displaying first contents and second contents in a broadcast program and wherein the second contents are multiple of first contents (fig. 15, fig. 16, fig. 17, lines 9-16 and 59-62 in col. 5, lines 2-16 in col. 16, and lines 12-23 in col. 23) in order to show broadcasting times with respect to the searched contents. Therefore, based on Tomita in view of Lawler, and further in view of Yoshinobu, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a multiple of a searched content in order to show broadcasting times in a broadcasting program schedule with respect to the searched content.

With respect to claim 11, Tomita and Lawler disclose the claimed subject matter as discussed above. Tomita further discloses a predetermined operation is performed with the terminal unit corresponding to the search results obtained by the searching means and displayed on the first displaying means (lines 22-43 and 53-60 in col. 2, line

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62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 36-40 in col. 7, lines 52-57 in col. 10, and lines 26-41 in col. 11). Tomita and Lawler are silent on a reproducing a musical piece. However, Yoshinobu discloses a search capability and requesting audio data corresponding to a musical piece and reproducing the audio data by audio reproducing means (lines 1-16 in col. 4, lines 59-62 in col. 5, fig. 10, fig. 14, fig. 18, and fig. 19) for a playback. Therefore, based on Tomita in view of Lawler, and further in view of Yoshinobu, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reproduce a musical piece in a search result for the playback.

The limitations of claims 20 and 33 are rejected in the analysis of claim 3 above, and these claims are rejected on that basis.

The limitations of claims 27 and 34 are rejected in the analysis of claim 11 above, and these claims are rejected on that basis.

6. Claims 1, 2, 5-10, 12-19, 22-26, 28-32, and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of The Korea Herald (hereinafter "KH") ("Internet-only TV station begins service", The Korea Herald (XBF), 10 July 1997, p.7).

With respect to claim 1, Tomita discloses a searching system for searching contents that were broadcasted (lines 44-52 in col. 2, lines 19-25 in col. 11, and fig. 13). Tomita discloses an inputting unit comprising first storing means for storing information representing at least time at which contents were broadcasted corresponding to a predetermined operation (lines 27-29 and 44-52 in col. 2, lines 8-16 in col. 4, lines 14-26 in col. 5, lines 36-40 in col. 7, and lines 26-29 in col. 11) and first communicating means for transmitting the information representing time stored in the storing means to an external unit (lines 15-27 in col. 2, lines 8-16 and 55-61 in col. 4, lines 14-26 in col. 5, and lines 46-50 in col. 7). Tomita discloses a searching unit comprising second storing means for correlatively storing information representing contents and broadcast time thereof (lines 29-43 in col. 2, lines 8-16 in col. 4, lines 31-42 in col. 5, lines 24-29 in col. 8, and lines 30-35 in col. 11) and searching means for searching information representing the contents stored in the second storing means corresponding to the information representing time (lines 44-52 in col. 2, lines 27-33 and 48-54 in col. 4, lines 31-42 in col. 5, line 60 in col. 7 thru line 14 in col. 8, and lines 19-25 in col. 11). Tomita discloses a terminal unit comprising second communicating means for receiving the information representing time transmitted from the inputting unit through the first communicating means (lines 15-27 in col. 2 and lines 31-42 in col. 5) and third communicating means for transmitting the information representing time received by the second communicating means and receiving search results transmitted from the searching unit (lines 44-52 in col. 2, lines 31-52 in col. 5, and lines 19-25 in col. 11). Tomita discloses first displaying means for displaying the information representing time

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received by the second communicating means and the search results by the searching unit (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 52-57 in col. 10, and lines 36-41 in col. 11). Tomita discloses buttons for operations, such as time-slot change, category-search, and search (fig. 6 and fig. 9). Tomita does not explicitly disclose an indicator for activation at the terminal unit to cause downloading of the contents associated with the search results. However, KH teaches a server (company) provides on-demand services that enable users to watch previously broadcast programs by downloading the previously broadcast programs. Therefore, based on Tomita in view of KH, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of KH to the system of Tomita for a download of a past broadcast program in order to enable users to watch previously broadcast program.

With respect to claim 2, Tomita discloses the information representing the contents includes information about the contents (fig. 14).

With respect to claim 5, Tomita discloses the transmission of the information representing time from the inputting unit to the terminal unit is virtually displayed (lines 22-43 in col. 2, line 64 in col. 3 thru line 7 in col. 4, lines 5-13 in col. 5, and lines 54-64 in col. 6).

With respect to claim 6, Tomita discloses second displaying means for displaying entries of information representing time stored in the first storing means (fig. 1, fig. 9, lines 5-13 and 27-29 in col. 5, and lines 54-64 in col. 6). Tomita discloses when the information representing time is received by the second communicating means, the

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virtual display of the first displaying means of the terminal unit is correlated with the display of the entries of the information representing time displayed on the second displaying means of the inputting unit (lines 44-52 in col. 2, lines 8-16 in col. 4, and lines 43-52 in col. 5).

With respect to claim 7, Tomita discloses when the number of entries of the information representing time displayed on the second displaying means decreases, the number of entries of the information representing time displayed on the first displaying means increases (lines 8-16 and 35-54 in col. 4, lines 30-42 in col. 5, and lines 52-57 in col. 10).

With respect to claim 8, Tomita discloses the terminal unit is an information terminal unit that is installed as a public unit (fig. 2, fig. 3, and lines 29-35 in col. 6).

With respect to claim 9, Tomita discloses the terminal unit is composed of a personal computer (lines 29-35 in col. 6).

With respect to claim 10, Tomita teaches a musical piece content (fig. 9 and lines 42-48 in col. 14).

The limitations of claim 12 are rejected in the analysis of claim 10 above, and the claim is rejected on that basis.

With respect to claim 13, Tomita discloses interface means for allowing information representing the contents stored in the second storing means and/or broadcast time of the contents to be changed from an external unit that has been properly filtered (line 65 in col. 6 thru line 4 in col. 7, lines 24-43 in col. 8, and lines 34-43 in col. 9).

With respect to claim 14, Tomita discloses program storing means for storing a control program that controls the inputting unit and wherein the control program is transmitted from the terminal unit to the inputting unit by the first communicating means and the second communicating means and stored to the program storing means (lines 22-43 in col. 2, line 64 in col. 3 thru line 7 in col. 4, lines 11-20 in col. 6, line 60 in col. 7 thru line 14 in col. 8, and fig. 9).

With respect to claim 15, Tomita discloses the control program is transmitted from the searching unit to the terminal unit by the third communicating means and then transmitted from the terminal unit to the inputting unit (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, and lines 30-43 in col. 8).

With respect to claim 16, Tomita discloses connecting means for connecting the terminal unit to a predetermined network and wherein the control program is transmitted to the terminal unit through the predetermined network connected to the terminal unit and then transmitted from the terminal unit to the inputting unit by the connecting means (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, lines 30-43 in col. 8, lines 29-40 in col. 6, fig. 2, and fig. 3).

With respect to claim 17, Tomita discloses reading means for reading data recorded on a predetermined record medium and wherein the control program is read from the record medium by the reading means and transmitted to the inputting unit (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, lines 30-43 in col. 8, lines 29-47 in col. 6, fig. 2, and fig. 3).

The limitations of claims 18, 32, and 35-42 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

The limitations of claim 19 are rejected in the analysis of claim 2 above, and the claim is rejected on that basis.

The limitations of claim 22 are rejected in the analysis of claim 5 above, and the claim is rejected on that basis.

The limitations of claim 23 are rejected in the analysis of claim 6 above, and the claim is rejected on that basis.

The limitations of claim 24 are rejected in the analysis of claim 7 above, and the claim is rejected on that basis.

The limitations of claim 25 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

The limitations of claim 26 are rejected in the analysis of claim 9 above, and the claim is rejected on that basis.

The limitations of claim 28 are rejected in the analysis of claim 14 above, and the claim is rejected on that basis.

The limitations of claim 29 are rejected in the analysis of claim 15 above, and the claim is rejected on that basis.

The limitations of claim 30 are rejected in the analysis of claim 16 above, and the claim is rejected on that basis.

The limitations of claim 31 are rejected in the analysis of claim 17 above, and the claim is rejected on that basis.

7. Claims 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of The Korea Herald (hereinafter "KH") ("Internet-only TV station begins service", The Korea Herald (XBF), 10 July 1997, p.7), and further in view of Lawler et al. (U.S. Patent No. 5,585,838)

With respect to claim 4, Tomita and KH disclose the claimed subject matter as discussed above. Tomita further discloses a predetermined operation is performed with the terminal unit corresponding to the search results obtained by the searching means and displayed on the first displaying means (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 36-40 in col. 7, lines 52-57 in col. 10, and lines 26-41 in col. 11). Tomita and KH do not explicitly disclose a search result that is purchasable. However, Lawler discloses ordering a selected program in searched program schedule information (line 61 in col. 13 thru line 48 in col. 14 and figs. 7-9), which teaches the search result is purchasable, for a profit from business marketing. Therefore, based on Tomita in view of KH, and further in view of Lawler, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the search result as purchasable in order to make a profit from the business marketing.

The limitations of claim 21 are rejected in the analysis of claim 4 above, and the claim is rejected on that basis.

8. Claims 3, 11, 20, 27, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of The Korea Herald (hereinafter "KH") ("Internet-only TV station begins service", The Korea Herald (XBF), 10 July 1997, p.7), and further in view of Yoshinobu et al. (U.S. Patent No. 5,686,954).

With respect to claim 3, Tomita and KH disclose the claimed subject matter as discussed above except second contents are multiple of first contents. However, Yoshinobu discloses a searching capabilities and displaying first contents and second contents in a broadcast program and wherein the second contents are multiple of first contents (fig. 15, fig. 16, fig. 17, lines 9-16 and 59-62 in col. 5, lines 2-16 in col. 16, and lines 12-23 in col. 23) in order to show broadcasting times with respect to the searched contents. Therefore, based on Tomita in view of KH, and further in view of Yoshinobu, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a multiple of a searched content in order to show broadcasting times in a broadcasting program schedule with respect to the searched content.

With respect to claim 11, Tomita and KH disclose the claimed subject matter as discussed above. Tomita further discloses a predetermined operation is performed with the terminal unit corresponding to the search results obtained by the searching means and displayed on the first displaying means (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 36-40 in col. 7, lines 52-57 in col. 10, and lines 26-41 in col. 11). Tomita and KH do not explicitly disclose reproducing a musical piece. However, Yoshinobu discloses a search capability and requesting audio

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data corresponding to a musical piece and reproducing the audio data by audio reproducing means (lines 1-16 in col. 4, lines 59-62 in col. 5, fig. 10, fig. 14, fig. 18, and fig. 19) for a playback. Therefore, based on Tomita in view of KH, and further in view of Yoshinobu, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reproduce a musical piece in a search result for the playback.

The limitations of claims 20 and 33 are rejected in the analysis of claim 3 above, and these claims are rejected on that basis.

The limitations of claims 27 and 34 are rejected in the analysis of claim 11 above, and these claims are rejected on that basis.

9. Claims 1, 2, 5-10, 12-19, 22-26, 28-32, and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of NPR (National Public Radio, "Talk of the Nation Science Friday With Ira Flatow" posted in 1998, 9 pages, retrieved from <http://web.archive.org/web/19981206192442/www.npr.org/programs/scifri/> on 1/13/05).

With respect to claim 1, Tomita discloses a searching system for searching contents that were broadcasted (lines 44-52 in col. 2, lines 19-25 in col. 11, and fig. 13). Tomita discloses an inputting unit comprising first storing means for storing information

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representing at least time at which contents were broadcasted corresponding to a predetermined operation (lines 27-29 and 44-52 in col. 2, lines 8-16 in col. 4, lines 14-26 in col. 5, lines 36-40 in col. 7, and lines 26-29 in col. 11) and first communicating means for transmitting the information representing time stored in the storing means to an external unit (lines 15-27 in col. 2, lines 8-16 and 55-61 in col. 4, lines 14-26 in col. 5, and lines 46-50 in col. 7). Tomita discloses a searching unit comprising second storing means for correlatively storing information representing contents and broadcast time thereof (lines 29-43 in col. 2, lines 8-16 in col. 4, lines 31-42 in col. 5, lines 24-29 in col. 8, and lines 30-35 in col. 11) and searching means for searching information representing the contents stored in the second storing means corresponding to the information representing time (lines 44-52 in col. 2, lines 27-33 and 48-54 in col. 4, lines 31-42 in col. 5, line 60 in col. 7 thru line 14 in col. 8, and lines 19-25 in col. 11). Tomita discloses a terminal unit comprising second communicating means for receiving the information representing time transmitted from the inputting unit through the first communicating means (lines 15-27 in col. 2 and lines 31-42 in col. 5) and third communicating means for transmitting the information representing time received by the second communicating means and receiving search results transmitted from the searching unit (lines 44-52 in col. 2, lines 31-52 in col. 5, and lines 19-25 in col. 11). Tomita discloses first displaying means for displaying the information representing time received by the second communicating means and the search results by the searching unit (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 52-57 in col. 10, and lines 36-41 in col. 11). Tomita discloses buttons for

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operations, such as time-slot change, category-search, and search (fig. 6 and fig. 9).

Tomita does not explicitly disclose an indicator for activation at the terminal unit to cause downloading of the contents associated with the search results. However, NPR teaches an indicator for activation (hyperlinks) at the terminal unit (a user computer) to cause downloading of contents of past broadcast programs. NPR also teaches searching the past broadcast programs (page 1). Therefore, based on Tomita in view of NPR, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of NPR to the system of Tomita for a download of a past broadcast program in order to enable users to watch previously broadcast program.

With respect to claim 2, Tomita discloses the information representing the contents includes information about the contents (fig. 14).

With respect to claim 5, Tomita discloses the transmission of the information representing time from the inputting unit to the terminal unit is virtually displayed (lines 22-43 in col. 2, line 64 in col. 3 thru line 7 in col. 4, lines 5-13 in col. 5, and lines 54-64 in col. 6).

With respect to claim 6, Tomita discloses second displaying means for displaying entries of information representing time stored in the first storing means (fig. 1, fig. 9, lines 5-13 and 27-29 in col. 5, and lines 54-64 in col. 6). Tomita discloses when the information representing time is received by the second communicating means, the virtual display of the first displaying means of the terminal unit is correlated with the display of the entries of the information representing time displayed on the second

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displaying means of the inputting unit (lines 44-52 in col. 2, lines 8-16 in col. 4, and lines 43-52 in col. 5).

With respect to claim 7, Tomita discloses when the number of entries of the information representing time displayed on the second displaying means decreases, the number of entries of the information representing time displayed on the first displaying means increases (lines 8-16 and 35-54 in col. 4, lines 30-42 in col. 5, and lines 52-57 in col. 10).

With respect to claim 8, Tomita discloses the terminal unit is an information terminal unit that is installed as a public unit (fig. 2, fig. 3, and lines 29-35 in col. 6).

With respect to claim 9, Tomita discloses the terminal unit is composed of a personal computer (lines 29-35 in col. 6).

With respect to claim 10, Tomita teaches a musical piece content (fig. 9 and lines 42-48 in col. 14).

The limitations of claim 12 are rejected in the analysis of claim 10 above, and the claim is rejected on that basis.

With respect to claim 13, Tomita discloses interface means for allowing information representing the contents stored in the second storing means and/or broadcast time of the contents to be changed from an external unit that has been properly filtered (line 65 in col. 6 thru line 4 in col. 7, lines 24-43 in col. 8, and lines 34-43 in col. 9).

With respect to claim 14, Tomita discloses program storing means for storing a control program that controls the inputting unit and wherein the control program is

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transmitted from the terminal unit to the inputting unit by the first communicating means and the second communicating means and stored to the program storing means (lines 22-43 in col. 2, line 64 in col. 3 thru line 7 in col. 4, lines 11-20 in col. 6, line 60 in col. 7 thru line 14 in col. 8, and fig. 9).

With respect to claim 15, Tomita discloses the control program is transmitted from the searching unit to the terminal unit by the third communicating means and then transmitted from the terminal unit to the inputting unit (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, and lines 30-43 in col. 8).

With respect to claim 16, Tomita discloses connecting means for connecting the terminal unit to a predetermined network and wherein the control program is transmitted to the terminal unit through the predetermined network connected to the terminal unit and then transmitted from the terminal unit to the inputting unit by the connecting means (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, lines 30-43 in col. 8, lines 29-40 in col. 6, fig. 2, and fig. 3).

With respect to claim 17, Tomita discloses reading means for reading data recorded on a predetermined record medium and wherein the control program is read from the record medium by the reading means and transmitted to the inputting unit (lines 10-51 in col. 7, lines 22-43 in col. 2, line 62 in col. 5 thru line 5 in col. 6, lines 30-43 in col. 8, lines 29-47 in col. 6, fig. 2, and fig. 3).

The limitations of claims 18, 32, and 35-42 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

The limitations of claim 19 are rejected in the analysis of claim 2 above, and the claim is rejected on that basis.

The limitations of claim 22 are rejected in the analysis of claim 5 above, and the claim is rejected on that basis.

The limitations of claim 23 are rejected in the analysis of claim 6 above, and the claim is rejected on that basis.

The limitations of claim 24 are rejected in the analysis of claim 7 above, and the claim is rejected on that basis.

The limitations of claim 25 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

The limitations of claim 26 are rejected in the analysis of claim 9 above, and the claim is rejected on that basis.

The limitations of claim 28 are rejected in the analysis of claim 14 above, and the claim is rejected on that basis.

The limitations of claim 29 are rejected in the analysis of claim 15 above, and the claim is rejected on that basis.

The limitations of claim 30 are rejected in the analysis of claim 16 above, and the claim is rejected on that basis.

The limitations of claim 31 are rejected in the analysis of claim 17 above, and the claim is rejected on that basis.

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10. Claims 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of NPR (National Public Radio, "Talk of the Nation Science Friday With Ira Flatow" posted in 1998, 9 pages, retrieved from <http://web.archive.org/web/19981206192442/www.npr.org/programs/scifri/> on 1/13/05), and further in view of Lawler et al. (U.S. Patent No. 5,585,838)

With respect to claim 4, Tomita and NPR disclose the claimed subject matter as discussed above. Tomita further discloses a predetermined operation is performed with the terminal unit corresponding to the search results obtained by the searching means and displayed on the first displaying means (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 36-40 in col. 7, lines 52-57 in col. 10, and lines 26-41 in col. 11). Tomita and NPR do not explicitly disclose a search result that is purchasable. However, Lawler discloses ordering a selected program in searched program schedule information (line 61 in col. 13 thru line 48 in col. 14 and figs. 7-9), which teaches the search result is purchasable, for a profit from business marketing. Therefore, based on Tomita in view of NPR, and further in view of Lawler, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the search result as purchasable in order to make a profit from the business marketing.

The limitations of claim 21 are rejected in the analysis of claim 4 above, and the claim is rejected on that basis.

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11. Claims 3, 11, 20, 27, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al. (U.S. Patent No. 6,100,884) in view of NPR (National Public Radio, "Talk of the Nation Science Friday With Ira Flatow" posted in 1998, 9 pages, retrieved from <http://web.archive.org/web/19981206192442/www.npr.org/programs/scifri/> on 1/13/05), and further in view of Yoshinobu et al. (U.S. Patent No. 5,686,954).

With respect to claim 3, Tomita and NPR disclose the claimed subject matter as discussed above except second contents are multiple of first contents. However, Yoshinobu discloses a searching capabilities and displaying first contents and second contents in a broadcast program and wherein the second contents are multiple of first contents (fig. 15, fig. 16, fig. 17, lines 9-16 and 59-62 in col. 5, lines 2-16 in col. 16, and lines 12-23 in col. 23) in order to show broadcasting times with respect to the searched contents. Therefore, based on Tomita in view of NPR, and further in view of Yoshinobu, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a multiple of a searched content in order to show broadcasting times in a broadcasting program schedule with respect to the searched content.

With respect to claim 11, Tomita and NPR disclose the claimed subject matter as discussed above. Tomita further discloses a predetermined operation is performed with the terminal unit corresponding to the search results obtained by the searching means and displayed on the first displaying means (lines 22-43 and 53-60 in col. 2, line 62 in col. 4 thru line 4 in col. 5, lines 11-21 in col. 6, lines 36-40 in col. 7, lines 52-57 in col.

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10, and lines 26-41 in col. 11). Tomita and NPR do not explicitly disclose reproducing a musical piece. However, Yoshinobu discloses a search capability and requesting audio data corresponding to a musical piece and reproducing the audio data by audio reproducing means (lines 1-16 in col. 4, lines 59-62 in col. 5, fig. 10, fig. 14, fig. 18, and fig. 19) for a playback. Therefore, based on Tomita in view of NPR, and further in view of Yoshinobu, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reproduce a musical piece in a search result for the playback.

The limitations of claims 20 and 33 are rejected in the analysis of claim 3 above, and these claims are rejected on that basis.


The limitations of claims 27 and 34 are rejected in the analysis of claim 11 above, and these claims are rejected on that basis.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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JEAN M. CORNELIUS
PRIMARY EXAMINER

1/20/05